



U. S. Department of Agriculture
Forest Service
Southeastern Area
State & Private Forestry

FOREST PEST MANAGEMENT

Report No. 82-3-41

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AERIAL DETECTION SURVEY OF FOREST INSECT AND DISEASE ACTIVITY, JEFFERSON NATIONAL FOREST, VIRGINIA

LAND OWNERSHIP OR SURVEY AREA: Jefferson National Forest

STATE: Virginia

AREA WITHIN SURVEY BOUNDARY: 1,490,000 acres

DATE: August 10-12, 1982

PERCENT COVERAGE: 25%

AIRCRAFT: Cessna 182

CREW: C.W. Dull, FPM & John Henricks, Jefferson National Forest

SURVEY OBJECTIVES

To detect forest insect and disease activity on the Jefferson National Forest. Special emphasis was placed on delineating areas of hardwood mortality which had been reported by the Clinch Ranger District. A ground check by Forest Pest Management personnel revealed that severe oak mortality had been occurring on the Clinch Ranger District in the area of High Knob. The primary objective of this survey was to delineate this area of oak mortality and determine the location of any additional mortality if present.

SURVEY RESULTS

Forest pest activity is at a very low level across most areas of the Jefferson National Forest at the time of this survey. Extensive oak mortality was observed in the High Knob area on the Clinch Ranger District. Additional hardwood mortality was observed between Jaybird Branch and Pine Orchard Branch on the extreme eastern portion of the Clinch Ranger District. Mortality in this area however was not nearly as extensive as around the High Knob area. Locust leaf miner defoliation was occurring in widespread areas. The attached map illustrates the area of severe oak mortality.

CONCLUSION

The oak mortality in the High Knob area is probably due to the heavy defoliation through successive years by the fall cankerworm, Alsophila pomataria (Harris), and linden looper, Erannis tiliaria (Harris) and Phigalia titea (Crammer). Additionally, a severe drought occurred in this area during the summer of 1981. An aerial photographic evaluation of this area is recommended to determine the impact of the oak mortality in the area of High Knob. In addition a biological evaluation to determine the status of the defoliator complex. The defoliation by the locust leaf miner, although unsightly, is considered of minor

importance. District personnel should continue field surveillance activities and report forest pest problems.

For additional information, contact:

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detection survey

